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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,444	12/20/2001	Lu Tung-Chieh	LUTU3001/EM	3776

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EXAMINER

PEYTON, TAMMARA R

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/022,444

Applicant(s)

TUNG-CHIEH ET AL.

Examiner

Tammara R Peyton

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-20 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The indicated allowability of claims 5-7 and 9-11 is withdrawn in view of the newly discovered reference(s) below. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 and 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burnett, (US 4,964,124).

As per claim 1, 4-7, 9-12, 13, 14, and 20, Burnett teaches a handheld information handling apparatus having a connector interface for swappable connection to appendant devices of two kinds, said appendant device of the first kind (parallel) when connected thereto communicating with said information handling apparatus using a first transmission standard, and said appendant device (RS-422/computer) of the second kind (serial) when connected thereto communicating with said information handling apparatus using a second transmission standard, a method of signal transmission between said information handling apparatus and said appendant devices, comprising the steps of:

representing a first set of signals generated according to said first transmission standard by a reduced set of signals (depending on serial/parallel), wherein said reduced

Art Unit: 2182

set of signals is transmitted over said connector interface while said information handling apparatus is communicating with said appendant device of the first kind;

transmitting a second set of signals according to said second transmission standard over said connector interface while said information handling apparatus is communicating with said appendant device of the second kind. (Abstract, cols. 2-12)

It would have been obvious to one of ordinary skill at the time the invention was made that Burnett teaches a connector interface (20) for swappable connection to appendant devices of two kinds (RS-422 interface or a parallel interface) wherein a reduced set of signal are used depending on the serial or parallel connection.

As per claims 2, 3, and 18, Burnett teaches distinguishing between the first and second set of signals to determine which set of signal will be sent over the connector interface.

As per claims 15-17, the PCMCIA, COMPACT FLASH, AND RS-232 are well known communication protocols, thereby making use of these well known communication standards obvious.

As per claim 19, it would have been obvious to one of ordinary skill at the time the invention was made Burnett teaches distinguishing whether one of said first appendant device and said second appendant device is connected to said handheld device.

Claims 5-7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al., (US 6,256,687).

As per claims 5 and 9-11, Ellis teaches a handheld (computer laptop) information handling system for performing a plurality of functions, comprising:

- a display component for displaying information thereon;

- a set of input components for operating the information handling system;

- a circuitry for processing and transferring a first number of parallel signals generated in accordance with a first transmission standard while one of said functions is being performed, wherein said first number of parallel signals are generated at a first clock rate;

- a first interface for external connection comprising a plurality of pins over which a second number of serial signals can be transmitted, wherein said second number is less than said first number;

- a first parallel-serial converter coupling said circuitry and said first interface and thereby allowing said first number of parallel signals transferred by said circuitry and said second number of serial signals transmitted over said first interface to be mutually convertible. (Abstract, cols. 2-15)

It would have been obvious to one of ordinary skill that Ellis teaches a serial bus device which operates at a first data rate and a parallel port device which operates at a second data rate and a buffer unit is coupled to the serial bus receiver and the parallel port device. The buffer unit stores the received data at the first data rate and transfers

Art Unit: 2182

the stored data to the parallel port device at the second data rate with obviously reduced set of signals depending on the serial or parallel connection.

As per claims 6 and 7, Ellis teaches wherein said first parallel-serial converter functions at a second clock rate, said second clock rate being a multiple of said first clock rate and wherein said second clock rate is four times faster than said first clock rate.

Allowable Subject Matter

Claim 8 is objected to as being dependent upon a rejected base claim

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammara Peyton whose telephone number is (703) 306-5508. The examiner can normally be reached between 6:30 - 4:00 from Monday to Thursday, (I am off every first Friday), and 6:30-3:00 every second Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin, can be reached on (703) 308-3301. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3718. Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Mailed responses to this action should be sent to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231.

Art Unit: 2182

Faxes for Official/formal (After Final) communications or for informal or draft communications (please label "PROPOSED" or "DRAFT") sent to:

(703) 872-9306

Hand-delivered responses should be brought to:

Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor
(Receptionist).

A handwritten signature in cursive script, reading "Tammara Peyton".

Tammara Peyton

March 21, 2005